R·I·T

Title: Blue M Oven

Semiconductor & Microsystems
Fabrication Laboratory **Revision: A** **Rev Date: 11/30/2009**

Approved by:

_____ / / _____ / /
Process Engineer Equipment Engineer

1 SCOPE

The purpose of this document is to detail the use of the Blue M Oven. All users are expected to have read and understood this document. It is not a substitute for in-person training on the system and is not sufficient to qualify a user on the system. Failure to follow guidelines in this document may result in loss of privileges.

2 REFERENCE DOCUMENTS

- Material Safety Data Sheet for the materials that you are processing
- Appropriate Tool Manuals

3 DEFINITIONS

n/a

4 TOOLS AND MATERIALS

4.1 General Description

4.1.1 The Blue M Oven has a temperature controller and may be used to bake at atmospheric pressure.

5 SAFETY PRECAUTIONS

5.1 Hazards to the Tool

5.1.1 Be careful not to contaminate the shelves with your photoresist or polymer. Wafers should have clean backs.

5.2 Hazards to the Operator

5.2.1 The interior of the oven as well as the door will become hot during operation.

6 INSTRUCTIONS

6.1 Operating the System Using the Temperature Presets

6.1.1 Press the **Start Switch**.

6.1.2 Press the **Power** switch to turn the system on. The Main Pilot light will illuminate.

6.1.3 Verify N_2 gas is on in service chase and set to 5 psi. Select either N_2 or CDA on the back of the tool. Verify flow meter is reading on front left of oven.

6.1.4 Press the RED button corresponding to the desired set point. Use the "PUSH TO READ SET TEMPERATURE" button to verify the set point. Maximum temperature is 250C.

6.1.5 Turn the **Cooling** switch **ON** for temperatures below 100C.

6.1.6 Insert wafers when the temperature on the Temperature Indicator reaches set point. Minimize the door-open time.

6.1.7 Remove wafers at the appropriate time.

6.1.8 Turn off N_2 or CDA on the back of the tool, and N_2 on the manifold in service chase.

6.1.9 Turn the **Power** switch **OFF**.

6.1.10 Turn off the system with the Normal Stop Switch.

6.2 Operating the System Using the Manual Set Points

6.2.1 Press the **Start Switch**.

6.2.2 Press the **Power** switch to turn the system on. The Main Pilot light will illuminate.

6.2.3 Verify N2 gas is on in service chase and set to 5 psi. Verify flow meter is reading on front left of oven.

6.2.4 To manually set a temperature, none of the RED buttons labeled "PRESS TO SET TEMPERATURE" should be depressed. If one is pressed, press a different one part way so that the first one comes up.

6.2.5 Set the target temperature using the thumb wheel labeled **Manual Temperature Setting**. Turn the **Cooling** switch **ON** for temperatures below 100C. Maximum temperature is 250C.

6.2.6 When the chamber temperature reaches the set temperature, the wafers can be inserted into the chamber.

6.2.7 Remove wafers at the appropriate time.

6.2.8 Turn off N_2 or CDA on the back of the tool, and N_2 on the manifold in service chase.

6.2.9 Turn the **Power** switch **OFF**.

6.2.10 Turn off the system with the **Normal Stop Switch**.

7 APPROPRIATE USES OF THE TOOL

7.1 Use only wafers that have clean backs to avoid contaminating the system.

REVISION RECORD

Summary of Changes	Originator	Rev/Date
Original Issue	Sean O'Brien	A-11/30/2009